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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,006

05/15/2006

Jurgen Baumle

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BACHMAN & LAPOINTE, P.C.

900 CHAPEL STREET

SUITE 1201

NEW HAVEN, CT 06510

EXAMINER

KEENAN, JAMES W

ART UNIT

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,006	Applicant(s) BAUMLE ET AL.	
	Examiner James Keenan	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29,30,32-36 and 38-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29,30,32-36 and 38-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/5/10 has been entered.

2. The amendment filed 1/5/10 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the showing in amended figure 1 of illumination device 22, compartment indicator 24 on rack 26, weighing device 28, and protective device 30 in particular locations on or relative to the vehicle 3. There is no support in the disclosure as originally filed that these elements would necessarily be located in the specific locations now shown in figure 1.

Applicant is required to cancel the new matter in the reply to this Office Action.

Re applicant's comments, the new matter objection to the drawing concerns only the portrayal of the specific locations of these elements in amended figure 1, not the existence of the elements *per se*. While applicant may assert that "what is shown in the drawings is consistent with the original disclosure", this is simply not true. The disclosure merely indicates the existence of these elements, not any specific location. Applicant's argument that "since the exact locations are not claimed, ... there is no

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issue of new matter” is similarly unpersuasive. The new matter objection to the amended subject matter shown in the drawing is not related to a rejection of the claims under 112/1st par. (Note: although there is a separate 112/1st par. rejection, it is not related to this issue).

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 6. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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5. Claims 29, 30, 32-36, and 38-44 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 29 and 36 recite a “rail guide for guiding an electric overhead suspended track”. No further description or portrayal of such a device is set forth in the specification or drawings. The vehicle 3 is disclosed in par’s. [0029] and [0035] as moving on a rail 5 via a drive (presumably reference numeral 6 shown in fig. 1 but not identified as such in the specification), and the vehicle is suspended, via cross-member 15, from a carriage 4. No element is shown or identified in the original disclosure as a “rail guide”, as recited in claims 29 and 36.

Claim 29 further recites that the controlling step comprises “determining a weight and a quantity of said goods using a weighing of the pallet and the goods thereon”. Claim 36 recites analogous structure for performing this function. The disclosure as originally filed is not believed to adequately enable one of ordinary skill to make and use the invention.

Applicant asserts (in the previous response filed 5/21/09) that a sensor or scales which measures the weight of goods being picked up may be connected to the forks. While this may be a feasible way to measure the weight, it is not necessarily the only way to do so, and the fact remains that it simply was not disclosed as such in the originally filed specification. Further, it is noted that claim 29 is limited to the fully

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automatic embodiment of picking up and transferring goods; i.e., no order picker is required. The only specific written description of such an embodiment is found on page 3, par. 11, which states that instead of an order picker, “the vehicle could also be assigned a robot device which carries out the pick-up or transfer”. Such a device is not shown, and it is unclear whether it would even have forks, as only the embodiment requiring an order picker discloses forks. Applicant further asserts that “the computer can be preprogrammed to know the weight ... and can compute the quantity from the measured weight”. Again, while this may be feasible, it is not necessarily the only way to determine quantity, and it simply was not disclosed as such in the original specification. Finally, it is noted that if this is indeed the manner in which the quantity of items is determined, it is unclear in what way this is considered to be a patentable distinction over the art, as applicant argues. If one of ordinary skill in the art would know that the manner in which the quantity of goods is determined is by simply computing the quantity from the measured weight, then this could only be because such a means of determining quantity was so well known and art recognized as to be admitted prior art.

Claim 44 is additionally rejected for its specific recitation of a “protective device for monitoring and securing said vehicle”. No further description or portrayal of such a device is set forth in the specification or drawings. It is entirely unclear of what such a device consists or how it could operate to perform the recited functionality.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 29, 30, 33-36, 38-42, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbinet (US 5,730,252) in view of Fenn (US 4,820,101) and Clemens (US 4,541,769).

Herbinet shows a method of order picking of goods located in a store, comprising a vehicle movable along storage aisles (col. 2, lines 18-21), moving the vehicle to a pick location (col. 2, lines 30-31), picking up and transferring goods (col. 2, lines 32-34), controlling the picking up and transferring by determining the weight and quantity of goods using a weighing device and quantity controlling device (col. 2, lines 38-42, col. 3, lines 51-55, and col. 5, lines 3-8), and comparing the weight and quantity of goods with predetermined values (col. 2, lines 42-47 and 60-67, and col. 5, lines 41-51). Also note display unit 17 on the vehicle of Herbinet (col. 4, lines 45-49 and 63-67) for indicating the pick location. Such a display would inherently be “illuminated” as broadly recited in claim 29, and is considered to be a “means for indicating ... using illumination from the vehicle”, as recited in claim 36.

Herbinet shows that the steps of moving the vehicle and picking up and transferring the goods is done by an order picker (acting in response to computerized instructions) rather than being fully automated. Herbinet also does not show an electric overhead suspended track along which the vehicle is guided or a column on the vehicle along which a means for supporting a pallet is vertically displaceable.

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Fenn shows a method and system for picking up and transporting goods 4 in a storage yard 5 ("store", as broadly claimed), including a vehicle 2 which travels under fully automated control of a computer 6 to pick up desired goods in a particular location along an "aisle" of the store, wherein the weight and quantity of the goods is determined on the vehicle and compared with a desired value (col. 17, lines 14-41 and line 56 to col. 18, line 18). Fenn teaches an optional operator who can monitor and/or manually control or override the automatic operation (col. 9, lines 34-44). Further, Fenn shows the vehicle to be a crane which may operate on an overhead suspended track (col. 6, lines 25-30), but does not show the vehicle to comprise a column along which a means for supporting a pallet is vertically displaceable.

Clemens teaches a vehicle suspended from a track and movable along rows of a warehouse, wherein the vehicle comprises a column 45 and a means 62 for supporting a pallet and lifting goods attached to the column so as to be vertically displaceable therealong.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the process and apparatus of Herbinet by providing fully automated control of the vehicle movement and the picking up and transferring of goods in addition to an operator, as taught by Fenn, to provide improved control and operation of the vehicle while still allowing operator intervention in the event of a malfunction of the automated control system.

It further would have been obvious for one of ordinary skill in the art at the time of the invention to have modified the process and apparatus of Herbinet by providing an

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overhead suspended track along which the vehicle was guided with a rail guide, as well as constructing the vehicle with a column along which a means for supporting a pallet was vertically displaceable, as jointly suggested by Fenn and Clemens, as this would simply be an alternate equivalent means of guiding an automated vehicle along rows of a store and picking up goods located therealong, the use of which in the apparatus of Herbinet would neither require undue experimentation nor produce unexpected results. Although Fenn does not disclose the use of an electric rail, the use thereof is considered a mere further design expediency, for example in an indoor environment in which a combustion engine would be undesirable.

Re claim 33, the vehicle of Fenn is a vertically adjustable crane which automatically adjusts to the desired storage height.

Re claim 34, Herbinet teaches transporting as many as six cartons 4 (goods containers) on the vehicle, at least one of which is empty (at least initially).

Re claim 35, Herbinet is considered to show “transporting an order picker with the vehicle”, as broadly claimed.

Re claim 38, the overhead track of Fenn is considered to form “a pick-up or transfer plane”, as broadly claimed.

Re claim 39, Herbinet shows the pick-up or transfer plane to be a platform.

Re claim 40, as noted above, Fenn shows a vertically adjustable pick-up or transfer plane.

Re claim 41, as noted previously, both Herbinet and Fenn provide for an order picker/operator on the vehicle.

Re claim 42, as noted previously, both Herbinet and Fenn teach identification means on the vehicle for indicating the goods to be removed.

Re claim 44, although neither Herbinet nor Fenn discloses a “protective device for monitoring and securing the vehicle”, the use thereof is considered an obvious and well known safety measure, particularly in view of the extremely broad nature of such terminology and applicant’s failure to show or describe any structural details of such a device.

8. Claims 32 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herbinet in view of Fenn and Clemens, as applied to claims 29 and 36 above, and further in view of Drapeau (US 3,908,800).

Although Herbinet as modified shows indicating the pick location, as noted above, it does not do so by illuminating the pick location with an indicator on the rack.

Drapeau teaches an illuminated indicator 13 in a rack for indicating to an order picker the proper location of articles to be picked.

It would have been obvious for one of ordinary skill in the art at the time of the invention to have further modified the process and apparatus of Herbinet by illuminating the pick location with an indicator on the rack, as taught by Drapeau, for easy identification of the proper pick location in the event an order picker was used instead of the fully automated picking.

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9. Applicant's arguments with respect to claims 29, 30, 32-36, and 38-44 have been considered but are moot in view of the new ground(s) of rejection.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Keenan whose telephone number is 571-272-6925. The examiner can normally be reached on Mon. - Thurs. The examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Keenan/
Primary Examiner, Art Unit 3652

5/18/10